

### **ABSTRACT**

A cluster of architecture having a star topology with the central services node at its center. Application server instances are organized in a star topology with the central services node at its center. The central services node may include services such as a messaging server for interinstance cluster communications. A locking server may also be provided to provide cluster wide locking to facilitate changes and updates within the cluster. A database may also be shared by all instances in the cluster, thereby reducing the need for data replication. In one embodiment, the message server has no persistent state. In such an embodiment, if the message server fails, it can merely be restarted without any state recovery requirement.